

In the Claims

Please cancel claims 1 – 14, without prejudice, and add claims 15 - 28, as follows:

1 – 14 (Canceled)

15. (New) Apparatus for blow molding containers from a thermoplastic material, said apparatus comprising:

extruder means for continuously extruding a spaced apart plurality of tubes of the thermoplastic material downwardly along a spaced apart plurality of vertical axes;

a first mold, said first mold having a first set of mold halves that open and close relative to each other to define, when closed, a plurality of first mold cavities;

a second mold, said second mold having a second set of mold halves that open and close relative to each other to define, when closed, a plurality of second mold cavities;

means for moving said first mold along a first closed path to present said first mold at a first position to engage, when open, a plurality of first finite lengths of the thermoplastic tube for blowing of the plurality of first finite lengths of the thermoplastic tubes into a plurality of containers as the first mold moves from the first position to a second position of the first closed path; and

means for moving said second mold along a second closed path to present said second mold at the first position to engage, while open, a plurality of second finite lengths, of the thermoplastic tube for blowing the plurality of second finite lengths, of the thermoplastic tubes into a plurality of containers as the second mold moves along the second closed path to a second position of the second closed path;

the first position of the first closed path and the first position of the second closed path being the same, and the second position of the first closed path and the second position of the second closed path being the same, said apparatus comprising no more than two molds.

16. (New) Apparatus for blow molding containers from a thermoplastic material, said apparatus comprising:

extruder means for continuously extruding a spaced apart plurality of tubes of the thermoplastic material downwardly along a spaced apart plurality of vertical axes;

a first mold, said first mold having a first set of mold halves that open and close relative to each other to define, when closed, a plurality of first mold cavities;

a second mold, said second mold having a second set of mold halves that open and close relative to each other to define, when closed, a plurality of second mold cavities;

means for moving said first mold along a first closed path to present said first mold at a first position to engage, when open, a plurality of first finite lengths of the thermoplastic tube for blowing of the plurality of first finite lengths of the thermoplastic tubes into a plurality of containers as the first mold moves from the first position to a second position of the first closed path;

means for moving said second mold along a second closed path to present said second mold at the first position to engage, while open, a plurality of second finite lengths of the thermoplastic tube for blowing of the plurality of second finite lengths of the thermoplastic tubes into a plurality of containers as the second mold moves along the second closed path to a second position of the second closed path;

the first position of the first closed path and the first position of the second closed path being the same, and the second position of the first closed path and the second position of the second closed being the same; said apparatus comprising no more than two molds and

a single in-mold labeling device positioned being beneath the extruder to introduce labels into the cavities of the first and second molds as the

first and second molds proceed along the first closed path and the second closed path, respectively.

17. (New) Apparatus according to claim 15 and further comprising:

a single container take-out device for successively removing blown containers from the first mold and the second mold at the second position.

18. (New) Apparatus according to claim 17 wherein:

the second position is horizontally spaced from the first position.

19. (New) Apparatus according to claim 18 wherein:

the second position and the first position are at the same elevation.

20. (New) Apparatus according to claim 15 wherein:

the first closed path includes a first leg extending outwardly in a first direction and downwardly from the first position; and

the second closed path includes a first leg extending outwardly in a direction opposed to the direction of the first leg of the first closed path and downwardly from the first position.

21. (New) Apparatus according to claim 16 and further comprising:  
a single container take-out device for successively removing  
blown containers from the first mold and the second mold at the second  
position.

22. (New) Apparatus according to claim 21 wherein:  
the second position is horizontally spaced from the first position.

23. (New) Apparatus according to claim 22 wherein:  
the second position and the first position are at the same  
elevation.

24. (New) Apparatus according to claim 16 wherein:  
the first closed path includes a first leg extending outwardly in a  
first direction and downwardly from the first position; and  
the second closed path includes a first leg extending outwardly in  
a direction opposed to the direction of the first leg of the first closed path and  
downwardly from the first position.

25. (New) A method of blow molding containers from a thermoplastic material, the method comprising:

substantially continuously extruding a thermoplastic material downwardly along a spaced apart plurality of the vertical axes;

engaging a plurality of first finite lengths of the thermoplastic material in a first mold set at a first position of the first mold set;

moving the first mold set in a closed path having a first leg in which the first mold set is moved from the first position outwardly in a first direction and downwardly;

engaging a second plurality of finite lengths of the extruded thermoplastic material in a second mold at the position where the first finite length of the extruded thermoplastic material was engaged by the first mold set after the first mold set has moved along the first leg of its first closed path;

moving the second mold set along a second closed path having a first leg extending outwardly in a second direction from the first position and downwardly, the second direction being opposed to the first direction;

removing the blown containers from the first mold set at a second position of the first closed path, the second position being spaced horizontally away from the first position; and

thereafter removing the blown containers from the second mold set at a second position of the second mold set, the second position of the second mold set being the same as the second position of the first mold set; the method comprising using no more than two molds.

26. (New) A method of blow molding containers from a thermoplastic material, the method comprising:

substantially continuously extruding a thermoplastic material downwardly along a spaced plurality of axes;

engaging a plurality of first finite lengths of the thermoplastic material in a first mold set at a first position of the first mold set;

moving the first mold set in a closed path having a first leg in which the first mold set is moved from the first position outwardly in a first direction and downwardly;

engaging a second plurality of finite lengths of the extruded thermoplastic material in a second mold at the position where the first finite length of the extruded thermoplastic was engaged by the first mold set after the first mold set has moved along the first leg of its first closed path;

removing the blown containers from the first mold set at a second position of the first closed path, the second position being spaced horizontally away from the first position;

thereafter removing the blown containers from the second mold set at a second position of the second mold set, the second position of the second mold set being the same as the second position of the first mold set; and

applying labels, in sequence, to interiors of the first mold set and the second mold set, the labels being applied to the interior of the first mold set at the first position of the first mold set and being applied to the interiors of the second mold set at the first position of the second mold set;

the method comprising using no more than two mold sets.

27. (New) Apparatus for blow molding containers from a thermoplastic material, said apparatus comprising:

extruder means for continuously extruding a spaced apart plurality of tubes of the thermoplastic material downwardly along a spaced apart pair of vertical axes;

a first mold, said first mold having a first set of mold halves that open and close relative to each other to define, when closed, a first plurality of mold cavities ;

a second mold, said second mold having a second set of mold halves that open and close relative to each other to define, when closed, a second plurality of mold cavities;



means for moving said first mold along a first closed path to present said first mold at a first position to engage, when open, a plurality of first finite lengths of the thermoplastic tube for blowing of the plurality of first finite lengths of the thermoplastic tube into a plurality of containers as the first mold moves from the first position to a second position of the first closed path;

means for moving said second mold along a second closed path to present said second mold at the first position to engage, while open, a second plurality of finite lengths of the thermoplastic tube for blowing the second plurality of finite lengths of the thermoplastic tube for blowing the second plurality of finite lengths of the thermoplastic tube into a plurality of containers as the second mold moves along the second closed path to a second position of the second closed path;

the first position of the first closed path and the first position of the second closed path being the same, and the second position of the first closed path and the second position of the second closed path being the same; and

means separate from the first mold set and the second mold set for grasping the extruded plurality of tubes and for moving downwardly before a plurality of finite lengths of the extruded thermoplastic tube is grasped by the first mold or the second mold, the means for grasping releasing the extruded plurality of thermoplastic tubes and withdrawing from the plurality of

thermoplastic tubes after the plurality of finite lengths of thermoplastic tube has been grasped by the first mold or the second mold.

28. (New) A method of blow molding containers from a thermoplastic material, the method comprising:

substantially continuously extruding a spaced apart plurality of lengths of a thermoplastic material downwardly along a spaced apart plurality of vertical axes;

engaging a first plurality of finite lengths of the thermoplastic material in a first mold set at a first position of the first mold set;

moving the first mold set in a closed path having a first leg in which the first mold set is moved from the first position outwardly in a first direction and downwardly;

engaging a second plurality of finite lengths of the extruded thermoplastic material in a second mold set at the position where the first plurality of finite lengths of the extruded thermoplastic was engaged by the first mold set after the first mold set has moved along the first leg of its first closed path;

moving the second mold set along a second closed path having a first leg extending outwardly in a second direction from the first position and downwardly, the second direction being opposed to the first direction;

removing the blown containers from the first mold set at a second position of the first closed path, the second position being spaced horizontally away from the first position; and

thereafter removing the blown containers from the second mold set at a second position of the second mold set, the second position of the second mold set being the same as the second position of the first mold set;

grasping the extruded plurality of lengths of the thermoplastic tube by a device separate from the first mold set and the second mold set and before the first plurality of finite lengths of the thermoplastic material or the second plurality of finite lengths of thermoplastic material is grasped by the first mold set or the second mold set;

moving the device downwardly;

releasing the thermoplastic material by the device; and

withdrawing the device from the thermoplastic material to permit the first plurality of finite lengths of the thermoplastic material in the first mold set or the second plurality of finite lengths of thermoplastic material in the second mold set, as the case may be, to move along the first closed path or the second closed path.